

Efficiency starts with the data centre

How colocation contributes to sustainability

Hardly any other topic has been on people's minds for as long as the climate crisis. This is accompanied by rising electricity prices, which are a major burden for Germany as an economy. Especially the effects on future life are in the focus of attention. This is why environmentally friendly measures to counter the crisis have become increasingly important - first and foremost the shift to renewable energies. "When operating data centres, there is a high demand for electricity to power the IT infrastructure," explains Jerome Evans, founder and managing director of firstcolo and diva-e Cloud GmbH. For more than 20 years, firstcolo has been operating data centres and therefore lays great importance on the efficiency of the corresponding areas. "We use 100 percent renewable energy," states Evans. He also points to their PUE (Power User Effectiveness) value of 1.25 - in 2020, the average in Germany was 1.63 - which compares the total energy consumption of the data centre with that of the IT infrastructure: "This means that we only need 25 percent of additional energy to operate the necessary data centre infrastructure. This could be, for instance, emergency power or air-conditioning systems that play an essential role in running the facility."

Optimising consumption

Climate neutrality of data centres until 2030: this is the demand of the EU Commission within the European Green Deal. One of the possible adjustments is the reduction of the energy demand. "This can be accomplished, for example, through the cooling or air conditioning of the data centre, as these have a high impact on the total power consumption of the respective data centre," explains Evans. "That's why we rely on modern cooling concepts with direct or indirect free cooling." When it comes to cooling technology within the data centres, firstcolo relies on cold aisle containment to effectively and economically supply cooled air to the respective server systems. "We make sure to achieve a temperature of between 21 and 24 degrees for the air supply within the cold aisles of our data centres," explains the expert. This ensures that the hardware is cooled sufficiently and that there is no unnecessary consumption of cooling power, which would be necessary for a lower temperature.

Thinking outside the box

To assess the situation around energy consumption and implement necessary optimisations, the PUE value alone is not enough. Instead, it requires an examination of all aspects of power consumption and a regular review of all relevant values. "For data centre providers, it is therefore important to continue to focus on sustainability in the future - alongside the already high standards that must be met in terms of quality," warns Evans. Modern insights should always be taken into account and adjustments should be made on an ongoing basis. "With this approach, firstcolo wants to guarantee efficient colocation operations and at the same time contribute to the ongoing efforts to combat the climate crisis," the expert concludes.

Further information about diva-e Datacenters GmbH can be found under first-colo.net.

firstcolo

As an operator of data centres in Germany, firstcolo, based in Frankfurt am Main, provides its customers with the highest level of service quality. In addition to classic colocation and the rental of server systems, firstcolo's range of services also includes storage-on-demand solutions, backup solutions and cloud services. firstcolo is part of the diva-e Group, which, as the leading transactional experience partner in Germany, has over 20 years of industry expertise in the digital world. Around 800 diva-e Group employees in 13 offices in 8 different locations take care of the needs of the wide-ranging customer base, which includes a large pool of industries from technology, retail and healthcare. In addition to large and well-known companies such as FC Bayern Munich, Siemens, Mister Spex, Audi or Sky, many other renowned customers are among them.